

Madigan Army Medical Center

Musculoskeletal Treatment Guidelines

SHOULDER BURSITIS/TENDONITIS/IMPINGEMENT

Diagnosis/Definition

- Shoulder pain arising either with or without trauma in which the active elevation of the shoulder greater than 70-90 degrees is problematic but passive range of motion (ROM) is essentially normal.

Initial Diagnosis and Management

- History and Physical exam.
- Plain radiographs are not required unless subacromial DJD is suspected.
- NSAIDs.
 - Adults - 200 to 400 milligrams (mg) every four to six hours as needed for up to 2 weeks. Example: Ibuprofen
 - Take tablet or capsule forms of these medicines with a full glass (8 ounces) of water.
 - Do not lie down for about 15 to 30 minutes after taking the medicine. This helps to prevent irritation that may lead to trouble in swallowing.
 - To lessen stomach upset, these medicines should be taken with food or an antacid.
- Appropriate activity limitations (i.e. no overhead activities)
- Encourage active ROM for the shoulder in all planes.
- Use of ice packs for 20 minutes every 2 hours for 72 hours.
- Total immobilization is contraindicated.

Ongoing Management and Objectives

- Expect resumption of active ROM with minimal pain after 7-14 days is expected.
- If pain and/or limitation of motion does not resolve then:
 - Obtain plain radiographs
 - Trial of different NSAID
 - Do not allow "frozen shoulder" to develop

Indication a profile is needed

- Any limitations that affect strength, range of motion, and general efficiency of upper arm, shoulder girdle, and upper back, including cervical and thoracic vertebrae.
- Slightly limited mobility of joints, muscular weakness, or other musculo-skeletal defects that may prevent hand-to-hand fighting and disqualifies for prolonged effort.
- Defects or impairments that require significant restriction of use

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Specifications for the profile

- Week 1-4
 - No upper body PT
 - No overhead activities
 - Limited lifting
 - No ruck

Patient/Soldier education or Self Care Information

- See attached sheet
- Demonstrate deficits that exist
 - Describe/show soldier his/her limitations
- Explain injury and treatment methods
 - Use diagram attached to describe injury, location and treatment.
- Instruct and demonstrate rehab techniques
 - Demonstrate rehab exercises as shown in attached guide
 - Warm up before any sports activity
 - Participate in a conditioning program to build muscle strength
 - Do stretching exercises daily
- Ask the patient to demonstrate newly learned techniques and repeat any other instructions.
- Fine tune patient technique
 - Correct any incorrect ROM/stretching demonstrations or instructions by repeating and demonstrating information or exercise correctly.
- Encourage questions
 - Ask soldier if he or she has any questions
- Give supplements such as handouts
- Schedule follow up visit
 - If pain persists
 - The pain does not improve as expected
 - Patient is having difficulty after three days of injury
 - Increased pain or swelling after the first three days
 - Patient has any questions regarding care

Indications for referral to Specialty Care

- PT if 50% or greater limitation of motion on initial or subsequent evaluations.
- PT if there is evidence of "frozen shoulder", i.e., loss of passive ROM.
- PT if no improvement after 3-5 days.
- Refer to Orthopedic Surgery if after completion of an appropriate physical therapy treatment regime there is no improvement in the condition.

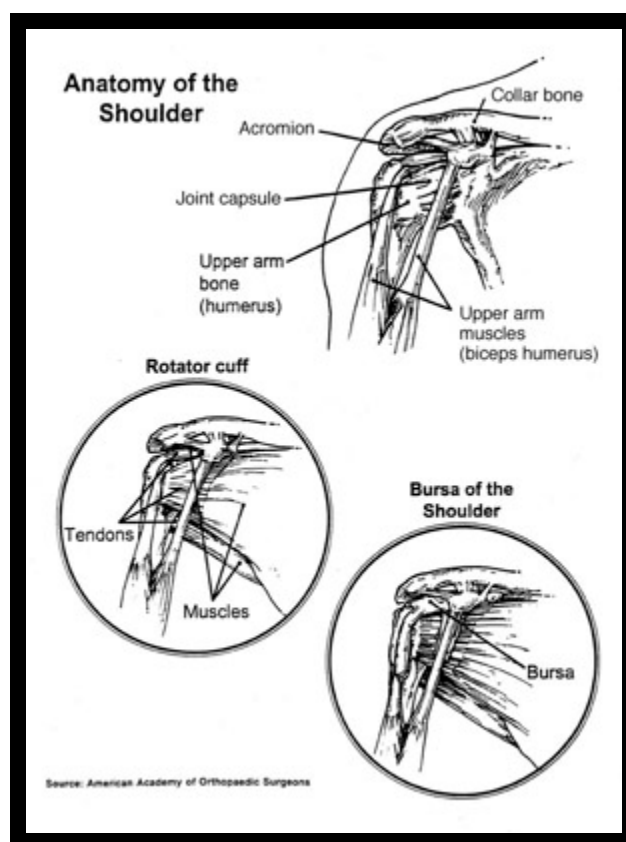
Referral criteria for Return to Primary Care

- Resolution of the acute or chronic symptoms.

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- Patient returns to their own baseline status.



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Exercises

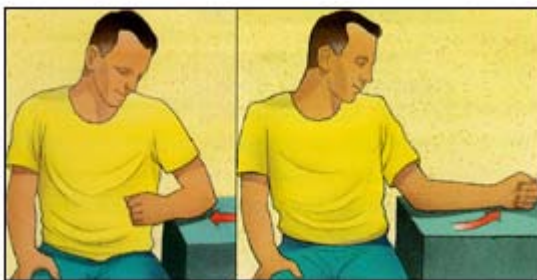
Regular exercises to restore your normal shoulder motion and flexibility and a gradual return to everyday work and recreational activities are important for your full recovery. Your orthopaedic surgeon and physical therapist may recommend that you exercise from 10 to 15 minutes 2 or 3 times a day during your early recovery period. They may suggest some of the following exercises. This guide can help you better understand your exercise and activity program.



Pendulum, Circular - Bend forward 90 degrees at the waist, using a table for support. Rock body in a circular pattern to move arm clockwise 10 times, then counterclockwise 10 times. Do 3 sessions a day.



Shoulder Flexion (Assistive) - Clasp hands together and lift arms above head. Can be done lying down (drawing A) or sitting (drawing B). Keep elbows as straight as possible. Repeat 10 to 20 times. Do 3 sessions a day.



Supported Shoulder Rotation - Keep elbow in place and shoulder blades down and together. Slide forearm back and forth. Repeat 10 times. Do 3 sessions a day.

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Walk Up Exercise (Active) - With elbow straight, use fingers to "crawl" up wall or doorframe as far as possible. Hold 10 seconds. Repeat 3 times. Do 3 sessions a day.



Shoulder Internal Rotation (Active) - Bring hand behind back and across to opposite side. Repeat 10 times. Do 3 sessions a day.

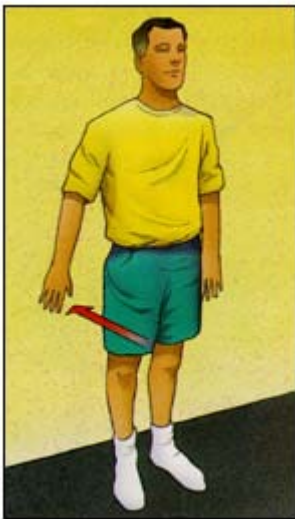


Shoulder Flexion (Active) - Raise arm to point to ceiling, keeping elbows straight. Hold 10 seconds. Repeat 3 times. Do 3 sessions a day.

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Shoulder Abduction (Active) - Raise arm out to side, elbow straight and palm downward. Do not shrug shoulder or tilt trunk. Hold 10 seconds. Repeat 3 times. Do 3 sessions a day.



Shoulder Extension (Isometric) - Stand with your back against the wall and your arms straight at your sides. Keeping your elbows straight, push your arms back into the wall. Hold for 5 seconds, then relax. Repeat 10 times.



Shoulder External Rotation (Isometric) - Stand with the involved side of your body against a wall. Bend your elbow 90 degrees. Push your arm into the wall. Hold for 5 seconds, then relax. Repeat 10 times.

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Shoulder Internal Rotation (Isometric) - Stand at a corner of a wall or in a doorframe. Place the involved arm against the wall around the corner, bending your elbow 90 degrees. Push your arm into the wall. Hold for 5 seconds, then relax. Repeat 10 times.



Shoulder Internal Rotation - Keep elbow bent at 90 degrees. Holding light weight, raise hand toward stomach. Slowly return. Repeat 10 times. Do 3 sessions a day.



Shoulder External Rotation - Keep elbow bent at 90 degrees at side. Holding light weight, raise hand away from stomach. Slowly return. Repeat 10 times. Do 3 sessions a day.

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Shoulder Adduction (Isometric) - Press upper arm against a small pillow alongside your body. Hold 5 seconds. Repeat 10 times. Do 3 sessions a day.



Shoulder Abduction (Isometric) - Resist upward motion to the side, push arm against back of chair. Hold 5 seconds. Repeat 10 times. Do 3 sessions a day.

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PHYSICAL PROFILE <small>For use of this form, see AR 40-501, the proponent agency is the Office of The Surgeon General</small>																																				
1. MEDICAL CONDITION SHOULDER BURSITIS/TENDONITIS/IMPINGEMENT				2. <table border="1" style="display: inline-table; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 20px;">P</td> <td style="width: 20px;">U</td> <td style="width: 20px;">L</td> <td style="width: 20px;">H</td> <td style="width: 20px;">E</td> <td style="width: 20px;">S</td> </tr> <tr> <td style="height: 20px;"></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>			P	U	L	H	E	S																								
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DA FORM 3349, MAY 86

REPLACES DA FORM 5302-R (TEST) DATED FEB 84 AND DA FORM 3349 DATED 1 JUN 80, WHICH ARE OBSOLETE
USAPPC V1.00

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PATIENT INFORMATION

Athletes, industrial workers and home maintenance buffs often suffer shoulder pain caused by excessive rubbing or squeezing (impingement) of the rotator cuff and shoulder blade.

Shoulder impingement syndrome involves one or a combination of problems, including inflammation of the lubricating sac (bursa) located just over the rotator cuff, a condition called bursitis; inflammation of the rotator cuff tendons, called tendinitis; and calcium deposits in tendons caused by wear and tear or injury. A torn rotator cuff is a potential outcome of shoulder impingement.

What is it?

- Bursitis: Frequent extension of the arm at high speed under high load (i.e., pitching a baseball) can cause bursitis. Non-sports activities such as painting, hanging wallpaper or drapes or washing windows also can cause it. Medical research shows that the older you get, the more likely you are to develop bursitis.
- Tendinitis: Tendinitis develops over time and is likely to occur when a person whose muscles are not in good condition starts an overly aggressive training program. In younger athletes, the causes of tendinitis are similar to those of bursitis.

What are the signs and symptoms?

Patients frequently try to ignore the first signs of shoulder problems. There is usually no single episode of the shoulder giving way and, at first, a person may notice only minor pain and a slight loss of strength. Loss of range of motion, especially the ability to lift the arm overhead, may be ignored for a while.

- Bursitis: Symptoms of shoulder bursitis include mild to severe pain and limited movement.
- Tendinitis: Inability to hold the arm in certain positions indicates tendinitis is present. Recurrent episodes of tendinitis may indicate a rotator cuff tear.

What is initial treatment?

- Bursitis: Once bursitis is diagnosed, rest is the recommended treatment. If necessary, ice packs can also be prescribed, as well as anti-inflammatory drugs, steroid injections and ultrasound therapy. Some patients require temporary use of a sling. After inflammation subsides, the patient should do shoulder strengthening exercises.
- Tendinitis: Acute tendinitis usually passes if the activity which caused it is avoided long enough to give the shoulder sufficient rest. Later, a

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patient can gradually resume the activity incorporating gentle heat and prescribed stretching beforehand and ice packs afterward. More severe cases may require anti-inflammatory drugs or a cortisone injection.

If initial treatment doesn't work, what's next?

- Bursitis: Severe bursitis can require surgery.
- Tendinitis: A physician may perform additional diagnostic tests to rule out other conditions before surgery is advised.

How can further injury be prevented?

Overuse injuries require attention. However in many cases, people do not seek medical care for their shoulder inflammation and think they can "work through the pain."

Don't play tennis or golf in an attempt to "loosen up" tightness. When a shoulder injury is ignored, it can become the source of chronic problems.

If your shoulder is sore after you use it actively, especially at the limits of your reach, give it some rest. If pain persists or worsens, consult your orthopaedist.

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Input was provided by:

- Occupational Therapy Clinic
- Physical Therapy Clinic
- Orthopedic Clinic
- Family Practice Clinic
- Okubo Clinic
- 555 Engineers
- 1st Brigade
- 3rd Brigade
- 62nd Medical Brigade

POC:

- Outcome Management

References:

- Mellion, I., Morris B. (2002). Team Physician's Handbook, 3rd Edition. Hanley & Belfus, Inc: Philadelphia, PA.
- Lillegard, Rucker. (1999). The Handbook of Sports Medicine. A symptom-oriented approach, 2nd Edition. Butterworth-Heinemann Medical: Burlington, MA.
- Baechle, Thomas, Earle, Roger. (2000) Essentials of Strength Training and Conditioning, 2nd Edition. Human Kinetics Pub: Champaign, IL
- Schenck, Robert, Jr. et al. (1999). Athletic Training and Sports Medicine, 3rd Edition. American Academy of Orthopedics: Tucson, AZ.
- http://www.mamc.amedd.army.mil/referral/Documents/Physical_Therapy/Shoulder_Bursitis.pdf